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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,149	09/04/2003	Jack C. Wybenga	SAMS01-00266	6529

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EXAMINER	
RUSSELL, WANDA Z	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/655,149	WYBENGA ET AL.	
	Examiner	Art Unit	
	Wanda Z. Russell	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-24 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 04 September 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-24** are rejected under 35 U.S.C. 102(e) as being anticipated by Sreejith et al. (Pub No. US 2003/0202511 A1).

For **claim 1**, Sreejith et al. teach a router (200-Fig. 2, and [0030], line 1) for interconnecting a plurality of interfacing peripheral devices (PMDs, 212, 222 etc. –Fig. 2), said router comprising:

a first switch fabric (251-Fig. 2);

a second switch fabric (252-Fig. 2); and

a plurality of routing nodes (210, 220, 230, 240-Fig. 2) coupled to said first and second switch fabrics (251, 252-Fig. 2), each of said routing nodes comprising an input-output processing (IOP) (216, 226 etc. –Fig. 2) module capable of forwarding ([0035], line 6) received data packets to other ones of said IOP modules via said first and second switch fabrics ([0036], lines 1-4) , wherein a first one of said IOP modules forwards received data packets directed to a second one of said IOP modules by alternating (an IOP and PMD(s) and linked by one or more switch fabrics, [0036], lines

2-3, and the multiple switch fabrics receive packets from IOPs on the multiple uplinks and transfer the received packets to destination IOPs, [0037], lines 3-5) between said first and second switch fabrics for each sequential data packet directed to said second IOP module.

For **claim 2**, Sreejith et al. teach the router as set forth in claim 1 wherein said first IOP module forwards received data packets directed to a third one of said IOP modules (236-Fig. 2) by alternating (an IOP and PMD(s) and linked by one or more switch fabrics, [0036], lines 2-3, and the multiple switch fabrics receive packets from IOPs on the multiple uplinks and transfer the received packets to destination IOPs, [0037], lines 3-5) between said first and second switch fabrics for each sequential data packet directed to said third IOP module.

For **claim 3**, Sreejith et al. teach the router as set forth in claim 2 wherein said alternate selection of said first and second switch fabrics for forwarding of data packets between said first and second IOP modules is independent (each, [0035], line 7) of said alternate (an IOP and PMD(s) and linked by one or more switch fabrics, [0036], lines 2-3, and the multiple switch fabrics receive packets from IOPs on the multiple uplinks and transfer the received packets to destination IOPs, [0037], lines 3-5) selection of said first and second switch fabrics for forwarding of data packets between said first and third IOP modules.

For **claim 4**, Sreejith et al. teach the router as set forth in claim 3 wherein said second IOP module is capable of determining (by packet scheduler 310-Fig. 3, and [0039], lines 11-15. If next expected data packet is not received, the data load statistics

will show that it is missing) that a next expected data packet from said first IOP module was not received in an alternating manner from said first and second switch fabrics.

For **claim 5**, Sreejith et al. teach the router as set forth in claim 4 wherein said second IOP module, in response to said determination that said next expected data packet from said first IOP module was not received in an alternating manner from said first and second switch fabrics, determines that one of said first and second switch fabrics is faulty and ceases forwarding data packets to said first IOP module via said faulty one of said first and second switch fabrics and forwards all subsequent data packets to said first IOP module via the other one of said first and second switch fabrics (255-Fig. 2, and [0037], lines 5-7).

For **claim 6**, Sreejith et al. teach the router as set forth in claim 5 wherein said first IOP module is capable of determining that a next expected data packet from said second IOP module was not received from said faulty one of said first and second switch fabrics and, in response to said determination, said first IOP module ceases forwarding data packets to said second IOP module via said faulty one of said first and second switch fabrics and forwards all subsequent data packets to said second IOP module via the other one of said first and second switch fabrics (255-Fig. 2, and [0037], lines 5-7).

For **claim 7**, Sreejith et al. teach a communication network (Fig. 2) comprising a plurality of routers (200, 290-Fig. 2) capable of transmitting (Abstract, line 6) data packets to and receiving (Abstract, lines 4-5) data packets from each other and from

interfacing peripheral devices (PMDs, 212, 222 etc. –Fig. 2) associated with said communication network, each of said plurality of routers comprising:

a first switch fabric (251-Fig. 2);

a second switch fabric (252-Fig. 2); and

a plurality of routing nodes (210, 220, 230, 240-Fig. 2) coupled to said first and second switch fabrics (251, 252-Fig. 2), each of said routing nodes comprising an input-output processing (IOP) (216, 226 etc. –Fig. 2) module capable of forwarding ([0035], line 6) received data packets to other ones of said IOP modules via said first and second switch fabrics ([0036], lines 1-4) , wherein a first one of said IOP modules forwards received data packets directed to a second one of said IOP modules 11 by alternating between said first and second switch fabrics for each sequential data packet directed to said second IOP module ([0036], lines 1-4).

For **claim 8**, Sreejith et al. teach the communication network as set forth in claim 7 wherein said first IOP module forwards received data packets directed to a third one of said IOP modules (236-Fig. 2) by alternating between said first and second switch fabrics for each sequential data packet directed to said third IOP module ([0035], lines 1-7).

For **claim 9**, Sreejith et al. teach the communication network as set forth in claim 8 wherein said alternate selection of said first and second switch fabrics for forwarding of data packets between said first and second IOP modules is independent (each, [0035], line 7) of said alternate selection of said first and second switch fabrics for forwarding of data packets between said first and third IOP modules ([0035], lines 1-11).

For **claim 10,** Sreejith et al. teach the communication network as set forth in claim 9 wherein said second IOP module is capable of determining (by packet scheduler 310-Fig. 3, and [0039], lines 11-15. If next expected data packet is not received, the data load statistics will show that it is missing) that a next expected data packet from said first IOP module was not received in an alternating manner from said first and second switch fabrics .

For **claim 11,** Sreejith et al. teach the communication network as set forth in claim 10 wherein said second IOP module, in response to said determination that said next expected data packet from said first IOP module was not received in an alternating manner from said first and second switch fabrics, determines that one of said first and second switch fabrics is faulty and ceases forwarding data packets to said first IOP module via said faulty one of said first and second switch fabrics and forwards all subsequent data packets to said first IOP module via the other one of said first and second switch fabrics (255-Fig. 2, and [0037], lines 5-7).

For **claim 12,** Sreejith et al. teach the communication network as set forth in claim 11 wherein said first IOP module is capable of determining that a next expected data packet from said second IOP module was not received from said faulty one of said first and second switch fabrics and, in response to said determination, said first IOP module ceases forwarding data packets to said second IOP module via said faulty one of said first and second switch fabrics and forwards all subsequent data packets to said second IOP module via the other one of said first and second switch fabrics (255-Fig. 2, and [0037], lines 5-7).

For **claim 13-15**, they are method claims corresponding to claims 1-3. Therefore they are rejected for the same reason above.

For **claim 16-18**, they are method claims corresponding to claims 4-6. Therefore they are rejected for the same reason above.

For **claim 19**, Sreejith et al. teach a router (200-Fig. 2, and [0030], line 1) for interconnecting a plurality of interfacing peripheral devices (PMDs, 212, 222 etc. –Fig. 2), said router comprising:

a plurality of switch fabrics (251, 252-Fig. 2); and

a plurality of routing nodes (210, 220, 230, 240-Fig. 2) coupled to said plurality of switch fabrics (Fig. 2), each of said routing nodes comprising an input-output processing (IOP) (216, 226 etc. –Fig. 2) module capable of forwarding ([0035], line 6) received data packets to other ones of said IOP modules via said plurality of switch fabrics, wherein a first one of said IOP modules forwards received data packets directed to a second one of said IOP modules by transmitting sequential data packets directed to said second IOP module in a round-robin manner through said plurality of switch fabrics ([0036], last 3 lines, and lines 1-9).

For **claim 20**, Sreejith et al. teach the router as set forth in claim 19 wherein said first IOP module forwards received data packets directed to a third one of said IOP modules (236-Fig. 2) by transmitting sequential data packets directed to said third IOP module in a round-robin manner through said plurality of switch fabrics ([0036], last 3 lines, and lines 1-9).

For **claim 21**, Sreejith et al. teach the router as set forth in claim 20 wherein said round-robin selection of said plurality of switch fabrics for forwarding of data packets between said first and second IOP modules is independent (each, [0035], line 7) of said round-robin selection of said plurality of switch fabrics for forwarding of data packets between said first and third IOP modules ([0035], lines 1-11).

For **claims 22,** Sreejith et al. teach the router as set forth in claim 21 wherein said second IOP module is capable of determining (by packet scheduler 310-Fig. 3, and [0039], lines 11-15. If next expected data packet is not received, the data load statistics will show that it is missing) that a next expected data packet from said first IOP module was not received in a round-robin manner from said plurality of switch fabrics.

For **claims 23,** Sreejith et al. teach the router as set forth in claim 22 wherein said second IOP module, in response to said determination that said next expected data packet from said first IOP module was not received in a round-robin manner from said plurality of switch fabrics, determines that one of said plurality of switch fabrics is faulty and ceases forwarding data packets to said first IOP module via said faulty one of said plurality of switch fabrics and forwards all subsequent data packets to said first IOP module via the other ones of said plurality of switch fabrics in a round robin manner (255-Fig. 2, and [0037], lines 5-7).

For **claims 23,** Sreejith et al. teach the router as set forth in claim 23 wherein said first IOP module is capable of determining that a next expected data packet from said second IOP module was not received from said faulty one of said plurality of switch fabrics and, in response to said determination, said first IOP module ceases forwarding

data packets to said second IOP module via said faulty one of said plurality of switch fabrics and forwards all subsequent data packets to said second IOP module via the other ones of said plurality of switch fabrics in a round robin manner (255-Fig. 2, and [0037], lines 5-7).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571) 270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZR

Seema S. Rao
SEEMA S. RAO 9/2/07
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600